

From: [Turner, Philip](#)
To: [Moore, Gary](#)
Cc: [Villarreal, Chris](#); [Rauscher, Jon](#)
Subject: RE: CES (Assistance Needed)
Date: Wednesday, February 18, 2015 10:27:40 PM

Gary,

It seems this table would be fine to use. Keep in mind, the RSL Tables are updated twice a year (May & October), and the TRRP/RBEL tables are usually updated once a year (usually in March). The RMLs should be updated along side the RSLs, but I don't think they are, or who is responsible for those. I'm not sure I understand what you mean by "combined exposure numbers". Could you clarify?

The RMLs are the same as the RSLs except, Yes, they are converted to 10⁻⁴ and HI=3. So, technically, they are not considered acute, BUT they certainly account for less/shorter exposure than the RSLs. Even so, the RMLs are probably somewhat more conservative than true "acute" levels would be.

The assumption of HI=0.3 for RMLs is an appropriate one. Whether or not to choose HI=0.1 or HI=0.3 depends first, on whether you would choose HI=1 or HI=3. I suspect, you would be using HI=3 for your scenario. In that case, you would use HI=0.3 IF you are calculating an HI for numerous contaminants. Generally, when you are calculating cumulative risk for 10 or more contaminants. Otherwise, use HI=1... or HI=3 more likely in your case.

From: Moore, Gary
Sent: Friday, February 13, 2015 1:36 PM
To: Turner, Philip
Cc: Villarreal, Chris; Rauscher, Jon
Subject: Re: CES (Assistance Needed)

Phil:

These are additional questions before I go forward on this:

- 1. Is this the correct table to use? I assume I use the combined exposure numbers?**
- 2. The Removal Management Levels are usually 10⁻⁴, and HI=3 so I can call them RMLs. Would that be considered Acute?**
- 3. How do I determine if I am supposed to use the HI=0.1 (child) and do I assume for RML that would be HI=0.3?**

Thanks for your help on this.

Gary Moore

Federal On-Scene Coordinator

U.S. EPA Region 6

214-789-1627 cell

214-665-6609 office

moore.gary@epa.gov

From: Turner, Philip
Sent: Friday, February 13, 2015 12:23 PM
To: Moore, Gary
Cc: Villarreal, Chris; Rauscher, Jon
Subject: Re: CES (Assistance Needed)

Gary,

For water, I suspect acute levels and higher target risk levels (e.g., 10E-04, HQ=3) will suffice. This assumes the following:

- 1) acute/short-term event
- 2) no long-term receptors
- 3) it's gone... where did it go?

In looking at your table, exceedances even at lower levels are small. Some, just barely over the chosen screening value.

Once the water is gone, soil that came into contact with the water is slightly different. That depends on expected receptors and how long they may be exposed. Again, in looking at your table, it doesn't look like there will be many exceedances.

HQ=3 can be calculated by multiplying the HQ=1 value by 3. When you compare the RSLs and RAMs table, the numbers don't look like they were exactly multiplied by three, but that's due to rounding during calculations.

Hope this helps. Please feel free to contact with if you have any additional questions.

Phil

From: Moore, Gary
Sent: Thursday, February 12, 2015 8:08 AM
To: Turner, Philip
Cc: Villarreal, Chris
Subject: Fw: CES (Assistance Needed)

Philip:

Since Jon is out, can you help me make a decision on the following.

The situation that occurred is a spill on a chemical facility that travelled off-site into drainage ditches with storm water. We pulled a sample and I am trying to determine an appropriate risk based comparison level for the report.

Please see the excel table and the string of emails.

Thanks

Gary Moore

Federal On-Scene Coordinator

U.S. EPA Region 6

214-789-1627 cell

214-665-6609 office

moore.gary@epa.gov

From: Moore, Gary

Sent: Friday, February 6, 2015 11:19 AM

To: Rauscher, Jon

Cc: Villarreal, Chris

Subject: Re: CES (Assistance Needed)

Jon:

I looked again at the RSL tables and I made my own table from those tables (cut and paste) from the Soil to GW. I would like you to give me some advice for the storm water/spill into the neighborhood and the use of the data in the table if appropriate. I realize this table is for long term exposures rather than short term exposures.

If I were to compare my data to the Long Term Exposure (Carcinogenic SL and the Non-carcinogenic SL child) would that be appropriate or should I use a Short Term Exposure (Acute) using a calculated 10^{-4} and/or $HI=3$. Of course, I don't know how to calculate the $HI=3$ numbers.

See the table.

Thanks

Gary Moore

Federal On-Scene Coordinator

U.S. EPA Region 6

214-789-1627 cell

214-665-6609 office

moore.gary@epa.gov

From: Moore, Gary

Sent: Tuesday, January 27, 2015 2:19 PM

To: Rauscher, Jon

Cc: Villarreal, Chris

Subject: Re: CES

Jon:

Any chance someone can recalculate these using the current numbers so that I can use it as a comparison values.

Thanks

Gary Moore

Federal On-Scene Coordinator

U.S. EPA Region 6

214-789-1627 cell

214-665-6609 office

moore.gary@epa.gov

From: Rauscher, Jon

Sent: Friday, January 23, 2015 4:12 PM

To: Moore, Gary

Cc: Villarreal, Chris

Subject: FW: CES

I have attached the table that was used during Hurricane Katrina for incidental ingestion. The excel spreadsheet should work but the toxicity values would need to be checked to see if they had been updated.

From: Rauscher, Jon

Sent: Friday, January 23, 2015 4:07 PM

To: Moore, Gary

Subject: RE: CES

Gary,

The scenario that you described would require to calculate a water RSL. None of the RSLs fit the scenario. During the BP Spill and Hurricane Katrina, water screening levels were calculated.

Thanks, Jon

From: Moore, Gary

Sent: Friday, January 23, 2015 3:14 PM

To: Rauscher, Jon

Subject: CES

Jon:

Is it appropriate to use the soil RSLs for the following or does it require us to calculate a water RSL for the senario I describe below. I am trying to finalize the report but I don't know exactly what ot compare the lab analyses against. This is the situation:

Chemicals spill that is carried into residential storm drains by stormwater. What would be the Risk Screening Level for the public contacting the diluted chemicals in the stormwater. My assumption is that the exposure would be possible dermal (getting in the water), inhalation (odors from the release), and ingestion (getting in the water).

Thanks

Gary Moore

Federal On-Scene Coordinator

U.S. EPA Region 6

214-789-1627 cell

214-665-6609 office

moore.gary@epa.gov